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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
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Washington, DC 20037-3213

EXAMINER

CHANG, RICHARD

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2616

DATE MAILED: 04/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/935,568

Applicant(s)

KELLER-TUBERG, STEFAN PAUL

Examiner

Richard Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-26 is/are pending in the application.
- 4a) Of the above claim(s) 1-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's arguments and amendment, filed on 04/18/2006, with respect to claims 13-26 have been considered but are moot in view of the new ground of rejection.

The finality of the rejection of last Office action is withdrawn.

Claims 1-12 had been canceled.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 13, 17, 21 and 25 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by US patent No. 6,285,674 B1 ("Soni et al.").

Regarding Claims 13, 17, 21 and 25, Soni et al. teach a method for providing multicast services on a network with a plurality of interfaces comprising a multicast

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router (LEC A), at least one subscriber access node (5 ATM switch), and a plurality of end user communications equipments (LEC B and C) (see Fig. 2), comprising of

providing a single, unidirectional multicast information flow between the multicast router (LEC A) and the subscriber access node (covered by LEC B and C) over a point-to-multipoint connection (as multicasting flow),

providing a separate bidirectional flow of control data between each of the end user communications equipments (covered by LEC B and C) and the multicast router (LEC A) via the subscriber access node (5 ATM switch) over separate point-to-point connections (ATM virtual channel),

replicating, in the subscriber access node (ATM switch), once for each of the end user equipments (covered by LEC B and C), multicast information data received over the single, unidirectional multicast information flow from the multicast router (LEC A) to form a separate unidirectional multicast information flow for each of the end user communications equipments (covered by LEC B and C), and

transmitting the separate flows of multicast information data replicated in the subscriber access node (5 ATM switch) over respective unidirectional point-to-multipoint connections between the subscriber access node (5 ATM switch) and respective ones of the end user communications equipments (covered by LEC B and C) (See Fig. 2, Col. 3, lines 29-47).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 14-16, 18-20, 22-24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent No. 6,285,674 B1 ("Soni et al.") in view of US patent No. 6,563,830 B1 ("Gershon et al.").

Regarding claims 16, 20 and 24, as discussed above, Soni et al. teach substantially all the claimed invention but did not disclose expressly the particular application involving limitations of "multicast router is an IP router".

Gershon et al. teaches a similar ATM switching system for multicast data communication wherein the multicast router (within 112) is an IP router (See Fig. 4, Col. 8, lines 48-54).

A person of ordinary skill in the art would have been motivated to employ Gershon et al. in Soni et al. in order to obtain a method and apparatus for multicast in an ATM based ELAN and to take advantage of multicast router as an IP route in claims 16, 20 and 24.

The suggestion/motivation to do so would have been to use multicast router as an IP route, as suggested by Gershon et al. in Col. 8, lines 48-54. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Gershon et al. with Soni et al. to obtain the inventions specified in claims 16, 20 and 24.

Regarding claims 14, 18 and 22, as discussed above, these claims have limitations that is similar to those of claims 13, 17 and 21 and Soni et al. further teaches that each of the unidirectional point-to-multipoint connections is an ATM multipoint connection between the subscriber access node (5) and the end user communications equipments (B, C) (See Col. 3, lines 29-47), thus it is rejected with the same rationale applied against claims 13, 17 and 21 above.

Regarding claims 15, 19 and 23, as discussed above, these claims have limitations that is similar to those of claims 13, 17 and 21 and Soni et al. further teaches that each of the bidirectional point-to-point connections is an ATM point-to-point connection between the subscriber access node (5) and the end user communications equipments (B, C) (See Fig. 2, Col. 3, lines 29-47), thus it is rejected with the same rationale applied against claims 13, 17 and 21 above.

Regarding claim 26, as discussed above, this claim has limitations that is similar to those of claim 25 and Soni et al. further teaches that a plurality different ones of the replicated unidirectional multicast information data flows are provided simultaneously to at least some of the end user communications equipments (B, C) (See Fig. 2, Col. 2, lines 5-18), thus it is rejected with the same rationale applied against claim 25 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Chang whose telephone number is (571) 272-3129. The examiner can normally be reached on Monday - Friday from 8 AM to 5 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RKC
rkc

Richard Chang
Patent Examiner
Art Unit 2616


RICKY Q. NGO
SUPERVISORY PATENT EXAMINER